



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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September 12, 2007

Mr. Patrick Tyndall
Environmental Program Manager
Federal Highway Administration
1835 Assembly Street, Suite 1270
Columbia, SC 29201-2430

Subject: EPA Review Comments on
Draft Environmental Impact Statement (DEIS)
Interstate 73: From I-95 to North Carolina
CEQ No. 20070316

Dear Mr. Tyndall:

The U.S. Environmental Protection Agency (U.S. EPA) Region 4 reviewed the subject Draft Environmental Impact Statement (DEIS) pursuant to Section 309 of the Clean Air Act, and Section 102 (2)(C) of the National Environmental Policy Act (NEPA). EPA appreciates your early coordination with us, and the Agency Coordination Team (ACT) process used to include resource agencies in the scoping and NEPA processes. We appreciate your attention to EPA's comments and concerns regarding the project. The purpose of this letter is to provide you with EPA's comments on the DEIS.

The DEIS assesses the potential environmental impacts of the no-build alternative and build alternatives for I-73. The build alternatives would create an interstate link to facilitate access between I-95 and I-74, terminating at I-74 in Richmond County, North Carolina. The planned southern portion of I-73 (previously evaluated in a separate DEIS) would facilitate travel between I-95 and the Myrtle Beach Region.

The DEIS identifies Alternative 2 as the Preferred Alternative selected by FHWA and SCDOT. Alternative 2 takes into consideration community concerns in addition to environmental parameters. The DEIS also includes information about the Community Impact Assessment for the project.

Although Alternative 2 has the lowest total wetland acreage impacts and wildlife habitat impacts, mitigation will be required for some areas. Specifically, a mitigation plan to compensate for the 114.3 acres of wetlands impacts will be required.

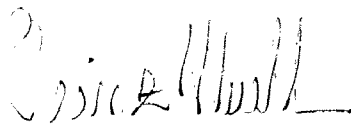
Jurisdictional streams will be identified and mapped during the wetland delineation for the Preferred Alternative. A compensatory mitigation plan is a necessary precursor to the application for a Section 404 permit. EPA looks forward to working with FHWA, SCDOT and the ACT

team to expedite development of the mitigation plan. The project will also require a Section 402 NPDES Permit.

Based on EPA's review of the DEIS, Alternative 2 received an "EC-1" rating, meaning that some environmental concerns exist that need to be further addressed. Specifically, further information should be included in the FEIS regarding wetlands delineation and mitigation plans, results of the protected species and archaeological surveys, and stream impacts. Impacts to prime farmlands and indirect and cumulative impacts are also concerns. Unavoidable noise impacts should be reasonably mitigated.

Please see our enclosed detailed comments. Thank you for the opportunity to comment on this project, and your continuing coordination with EPA. If we may be of further assistance, please contact me or Ramona McConney of my staff at (404) 562-9615.

Sincerely,

A handwritten signature in black ink, appearing to read "Heinz J. Mueller", with a horizontal line extending from the end of the signature.

Heinz J. Mueller, Chief
NEPA Program Office

Enclosures: Detailed review comments
Summary of Rating Definitions and Follow Up Action

cc: Mitchell Metts, P.E., SCDOT

**Detailed EPA Review Comments on
Draft Environmental Impact Statement (DEIS)
Interstate 73: From I-95 to North Carolina
CEQ No. 20070316**

General Comments

Overall, the DEIS is clear and very well written, with many helpful maps and illustrations. We appreciate the indexing and the reader-friendly style of the document, which facilitated review of the document. We commend FHWA and SCDOT for their excellence in producing this document; this DEIS fully describes NEPA issues, and our reviewers appreciated its quality and thoroughness. We also appreciated your attention to Invasive Species and Migratory Birds in the DEIS.

We appreciate FHWA's and SCDOT's outreach and interaction with agencies and local communities, giving them the opportunity to offer input and comments on the proposed project. The Community Impact Assessment in the DEIS is very descriptive.

The DEIS notes that there is uncertainty regarding whether I-73 will be a toll road. Further NEPA analysis will be needed if the facility is tolled, since tolling would be expected to influence the amount of impacts.

Alternatives

Alternative 2 was selected as the Preferred Alternative by FHWA and SCDOT. This alternative has the lowest amount of wetland impacts (114.3 acres), and the least impacts to total farmland, prime farmland, lowest cost, lesser number of relocations, close proximity to existing infrastructure, and good location to serve the communities of the project study area. Many agencies, local governments and members of the public support this alternative.

Air Quality

The DEIS states that "*Air quality impacts are not anticipated by the proposed project,*" (Section 3.9.3). The project area is currently in attainment of the NAAQS standards. I-73 is included in the South Carolina Transportation Infrastructure Program. Monitoring data for both the ozone and PM2.5 standards should be included in the FEIS.

Cultural Resources/Historic Preservation

According to the DEIS, the Preferred Alternative would not directly affect any known above ground historic resources. A detailed archaeological resources survey will be completed for the Preferred Alternative prior to the FEIS.

Environmental Justice

Efforts were made to shift alignments to avoid and minimize impacts to communities in the study area, including EJ communities. EJ census block data showed that impacts to low-income and/or minority communities in the project study area would not be disproportionate compared to the demographic composition of the project study area as a whole. In addition, the DEIS states that mitigation opportunities may exist for EJ communities, and that options will be studied further during the public involvement process for the FEIS.

Noise

Noise Measurements: Since the proposed roadway will be an interstate highway, the truck portion of anticipated traffic may significantly contribute to noise impacts. Trucks are considerably noisier than cars (noise from one truck equals that of many cars). If I-73 will have heavy truck traffic, this would contribute to higher dBA levels.

In addition to traffic noise affecting residences and commercial sites, it should be noted, relevant to the proposed stream crossings, that traffic across bridges can be particularly noisy. This is because bridges are high and exposed, sound travels well and is unimpeded over water, and vehicle tires traveling across expansion joints produce additional noise. Overall, traffic noise is an environmental concern in terms of the project incremental increases over existing levels, and the resultant projected noise levels.

A 10 dBA increase (at any existing noise level) is perceived as a doubling of sound by the human ear. Section 3.8.4 of the DEIS states that 15 dBA or greater is a substantial increase.

Noise Mitigation: Impact avoidance and minimization is particularly important for noise impacts, due to the difficulty in effectively mitigating for noise. The DEIS states that efforts were made to avoid roadway alignments in close proximity to communities, which resulted in avoidance of many traffic noise impacts. However, it was not possible to avoid all impacts, and some areas will be affected by noise from I-73. The DEIS states that, based on a preliminary analysis, noise barriers for impacted areas would not be reasonable based on cost per benefited receptor.

Unavoidable noise impacts should be reasonably mitigated. Other forms of noise mitigation (or their combination) should therefore be considered in addition to barriers where they are shown to be infeasible or unacceptable, particularly in residential areas. These forms may include sound proofing of any significantly affected public facilities, shifting of the right-of-way (ROW) to include residential or commercial receptors that otherwise would be adjacent but outside the ROW and be heavily impacted, and/or development of vegetative screens as part of the landscaping in order to provide a visual separation from the project ROW.

It is also our understanding that the type of roadway surfacing material may substantially influence the amount of noise impacts generated. As long as feasibility and safety requirements are met, surfacing materials which minimize noise through source reduction are preferred.

Finally, noise levels should be monitored after construction, to determine the effectiveness of the mitigation and to determine whether further measures or mitigation are needed.

Water Quality

The Preferred Alternative would result in 75 stream/ditch crossings in five watershed units (Pee Dee River, Crooked Creek, Three Creeks and Buck Swamp). Approximately 8100 linear feet of stream impacts would result.

The proposed bridges will require a Section 404 Permit from the USACE and a Section 401 Water Quality Certification from the South Carolina Water Division. The FEIS should include updated information regarding these actions.

Bridging across the entire floodplain of the stream crossings would help to avoid environmental impacts. The DEIS states that for some rivers and streams, bridge pilings might be required within the channel (page 3-282).

Jurisdictional streams will be identified and mapped during the wetland delineation for the Preferred Alternative. The installation of pipes or box culverts for stream crossings would require water body modification and could affect aquatic species movement. Further information should be provided in the FEIS regarding jurisdictional streams.

Wetlands

Your clear descriptions of the wetland resources in the DEIS are exemplary, and EPA appreciates your attention to detail in the discussion of this important subject area. Wetlands impacts are a significant concern, due to the number and quality of wetlands in the project area (114 acres).

The Preferred Alternative minimizes impacts to wetlands acreage in comparison with the other alternatives. However, mitigation will be required for unavoidable impacts resulting from I-73 construction. In comparison with the other build alternatives, Alternative 2 has the lowest total wetland acreage impacts.

We appreciate the project team's ongoing coordination with EPA regarding wetlands mitigation and the Section 404 Permitting process. A compensatory mitigation plan is a necessary precursor to the application for a Section 404 permit. EPA looks forward to working with FHWA, SCDOT and the ACT team to expedite development of the mitigation plan. The DEIS notes that a modified version of the Charleston District SOP will be used.

Prime Farmland

We note that the Preferred Alternative would result in a loss of 805 acres of prime farmland. We have this technical comment regarding Page 3-159: the analysis is correct, however, the sites receiving less than 160 points under LESA criteria need not be given further consideration for *protection* (per 7CFR Part 658.4 & 658.7) prior to considering mitigation. FPPA regulations refer to avoidance and minimization of impacts to prime farmlands, as well as protection.

Assistance from a Lead Federal agency to impacted prime farmlands property owners may include providing financing or loans, managing property, providing technical assistance, improving access to other farmlands (the split access issue is discussed on Page 3-160), and even acquiring land. SCDOT/FHWA should consider financial assistance/technical assistance for those farms/acreages that are in the Conservation Reserve Program (10 sites; 19 acres for Alternative 2 - from Table 3.44) that will be directly impacted by the project's preferred alternative. The DEIS mentions mitigation on Page 3-165, however, FHWA needs to consider providing compensation for direct losses.

Secondary and Cumulative Impacts

Due to the large-scale and regional scope of I-73, significant secondary and cumulative impacts are anticipated. The DEIS evaluates the potential for new development in the project area as a result of I-73. An anticipated benefit of the project is economic development at interchanges, potentially bringing new businesses and with economic benefits for some existing businesses and communities.

According to the DEIS, Alternative 2 is more likely to result in growth than the other two build alternatives and the no-build alternative.

The DEIS describes indirect and cumulative impacts clearly, however, it would be helpful if potential indirect and cumulative impacts were summarized in a table in the FEIS.

SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION*

Environmental Impact of the Action

LO-Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1-Adequate

The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collecting is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information

The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment